

Thomas Hilbert
Environmental Engineer
Winnebago Reclamation
8403 Lindenwood Rd.
Rockford, IL 61109
(815) 874-4806
June 2, 1993



Mr. Bernard Schorle
Remedial Project Manager
USEPA Region V
77 West Jackson Boulevard
Chicago, IL 60604-3590

Re: ACME Design, State Financial Assurance for CERCLA activity,
and Landfill Gas Quality.

Dear Bernie:

Enclosed are the following items:

- 1) A brief review of the ACME GW extraction design as discussed at the meeting held at WARZYN 4/13/93.
- 2) Communications regarding CERCLA Financial Assurance implementation at the state level.
- 3) An article that identifies landfill gas composition from MSW and MSW/Hazardous landfills and calculates the potential risk from exposure to landfill gas.

I hope that this is of some use to you.

Sincerely, -

A handwritten signature in dark ink, appearing to read "Th Hilbert".

Thomas Hilbert

TO: Gary Marzorati
FROM: Thomas Hilbert
DATE: April 16, 1993
SUBJ: Letter of Credit for Superfund financial assurance

I received a call from John Taylor (IEPA/BOL/financial assurance) on 4-16 regarding the Letter of Credit for superfund financial assurance. John was not aware of the remedial action at the landfill and was curious why he would receive a copy of the letter. Apparently the letter was sent to his desk by mistake. However, as a result of his reviewing the letter, he questioned the use of the "landfill and closure and postclosure fund" as a mechanism to deposit money set aside for the superfund remedial action. This fund (Sec. 21.1c of the Act) is specifically for solid waste landfills covered under sec. 21d of the act. He stated that as far as he knew that there was no precedence to use this fund for RCRA cleanup actions and felt that it may not be appropriate to use this fund. He mentioned that the state generally has alternate mechanisms that establish site specific funds through which money forfeited to the state would pass. He did also state that at this point in time it may not be worth the effort to arrange things any differently. John is no longer involved and the letter was forwarded to Fred Nika.

I spoke with Fred to see if he felt that there was a need to change the wording in the letter. He was not familiar with the states mechanisms for financial assurance under RCRA cleanup actions. I asked him to please call either John Holmstrom or myself if he felt that the state needed to have different wording in the letter.

Thomas Hilbert

April 19, 1993

Mr. Larry Eastep
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, IL 62706

Recycling and
waste disposal

Dear Larry:

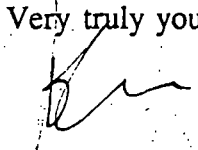
There were a number of instances during the permit process in which I thought it might be helpful to provide you or Chris Liebman with information on the CERCLA work on the existing landfill. I am not sure how much the IEPA remediation staff exchanges information with the permit staff, but if it would be helpful for Chris or others to have periodic "updates," we would be glad to provide them.

On a related issue, the CERCLA consent decree requires that we provide financial assurance that the remedy will be performed. To do so, we have provided a letter of credit and a trust fund which, together, will provide a total of \$6.2 million in financial assurance. The trust fund itself has an initial balance of over \$400,000 and additional contributions will increase it to over \$2.5 million in roughly five years.

Most (if not all) of the elements of the CERCLA remedy are the same activities as those required for site closure and post closure care under the new regulations. Accordingly, we prepared the trust fund and the letter of credit so that each instrument could be drawn on by the USEPA under the Consent Decree or by IEPA under the closure/post closure financial responsibility regulations. Our intention is to have the trust fund and letter of credit accepted to meet our state financial responsibility requirement at the time of the next biennial review. The instruments themselves follow the format set forth in the state regulations and the activities which they cover under CERCLA are identical to those required under state regulations.

I thought I would let you know about our intentions well in advance because the remediation staff has already received a copy of the letter of credit. I would be happy to give you any additional information on the CERCLA financial assurance instruments whenever you like. In the meantime, I thought I would let you know what was coming up.

Very truly yours,


John Holmstrom III
Winnebago Reclamation Service, Inc.

4920 Forest
Road
Loves Park
Illinois 61111

P.O. Box 2071
Loves Park
Illinois 61130

654.5952
654.4717

MEETING WITH WARZYN/USEPA - 04/13/93
SOUTHEAST OPERABLE UNIT RI/ACME GW EXTRACTION 30%

Attendees: Gary Parker - Warzyn, Chicago
Al Schmidt - Warzyn, Chicago
Bernard Schorle - EPA, Region V

30% DESIGN SUMMARY:

- Bernie initiated the meeting to discuss specific questions he had regarding the Harding and Lawson 30% design submittal for the proposed ground water extraction system. He was also willing to discuss his initial ideas regarding what type of decision (ROD) he would make concerning the Southeast Corner.
- The HLA design calls for 5 "Mass Removal" wells that would run in a N-S line starting just north of well B5 and extending to well STI6s. There are two wells in this system that are adjacent to B4 and MW202. The pumpage on the "Mass Removal" system would range from 1-5 GPM. In general these will be shallow wells with the exception of EXW-4. All wells drilled in bedrock will be completed as open holes if conditions allow. The well depths are as follows:

	COMPLETION INTERVAL (feet Below ground Surface)	
EXW-1	15-30	Sandy gravel and Highly weathered dolomite?
EXW-2	25-40	Bedrock
EXW-3	25-40	Bedrock
EXW-4	90-130	Bedrock
EXW-5	25-40	?Probably Silty, clayey fine sand and weathered bedrock.

- The capture well design calls for 10 wells running in a N-S direction through well G120b with doglegs to the NW and SE. This is very similar to what Ben Costello stated as a rough design in the fall of 92'. The pumpage on the barrier wells will range from 1-5 GPM. The wells are designed to draw on an ~110' interval except for extraction wells located near G120b and STI5D. The design calls for an open borehole of 12" and well spacing of 200ft.

MEETING NOTES:

- The problems associated with designing a GW containment system within the fractured bedrock was the primary focus of the meeting.
- Capture may be specific to a particular zone within the well completion interval. Ken Quinn (Warzyn) has seen systems in which large variations in the hydraulic conductivity allow most of the water to be drawn from a single zone within a well. This could occur if the pump were set next to an area of high hydraulic conductivity within the well bore.
- HLA is currently planning on monitoring the containment system drawdown through the use of piezometers placed between two extraction wells. The results from monitoring the piezometers may not represent what is actually happening in the whole borehole. Much of the drawdown may occur within a discrete zone within the extraction well and this zone may not be contiguous to the nearby piezometer. In addition, the piezometer may not provide an accurate representation of the GW chemistry within the extraction well unless it is hydraulically connected to the same fractures as the extraction borehole.
- The 30% design does not outline how the initial water quality for the containment system will be defined. Will they draw a water quality sample from the whole completion interval or will they attempt to pack off discrete zones.
- After some discussion on the potential inadequacies of the HLA design suggestions were put forth that would alleviate some of these concerns.
 1. A well network should not be drilled by simply selecting wellbore locations from predefined locations on a map.
 2. Perform packer tests on discrete intervals within the well bore to determine water quality and if feasible hydrologic data on the same interval.
 3. Determination of well locations should incorporate data derived from item 2 as well as historical data. Thus, the spacing and overall depth of wells should vary depending on contaminant patterns and hydrologic properties of localized areas.
 4. Ongoing monitoring of the extraction system for changes in water quality should be done in a manner consistent with item 2.
- Since HLA has not proposed how they will sample and monitor the network and will not do so until the 90% design submittal the above items may or may not be significant concerns.

SOUTHEAST CORNER:

- Bernie is committed to writing a ROD for the SE Corner. This will probably be a no action decision that may require establishment of at least one monitoring well established at a greater depth. However, he is not certain if this would provide a useful purpose.